

THE MISSOURI
Natural Areas
PROGRAM





PAUL CHILDRESS

PICKLE SPRINGS NATURAL AREA

“...the traveler in the interior is often surprised to behold at one view, cliffs and prairies, bottoms and barrens, naked hills, heavy forests, and rocks, and streams, and plains, all succeeding each other with rapidity and mingled with the most pleasing harmony.”

—Henry Rowe Schoolcraft
from the *Journal of a Tour into the Interior of Missouri and Arkansas in 1818 and 1819*

MISSOURI'S NATURAL LEGACY

Missouri's diverse landscapes have blessed the state with a great variety of aquatic and terrestrial natural communities and geologic features. From the rocky ridges of the Ozarks to the swamps of the southeast, Missouri features a mosaic of different landforms. Rolling prairies in the southwestern and northern parts of the state are some of the largest remaining unplowed tallgrass prairies in the Midwest.

Two of the country's mightiest rivers border and cross Missouri, and the state's streams and springs are among the most scenic in the nation. Underground, Missouri boasts some of the most extensive and biologically rich caves in the country. The forests and woodlands of the Ozarks constitute the largest block of wooded land in the central Midwest.

Differences in geology, soils, plants and animals throughout the state give rise to different natural communities.



JIM RATHERT

ST. FRANCOIS MOUNTAINS NATURAL AREA

LOSING OUR ORIGINAL LANDSCAPE

During the last 200 years, the state's natural landscape has changed dramatically. Vast acreages have been impacted by agriculture, urban sprawl, highway construction, dams and reservoirs, mining, stream channelization, overgrazing and indiscriminate logging. Only about a third of the state retains the same land cover it had at the time of statehood. For certain natural communities, such as tallgrass prairies and wetlands, only very small remnants remain.

WHAT ARE NATURAL AREAS?

Natural areas are natural communities or geologic features that represent the natural character, diversity and ecological processes of Missouri's native landscapes. Natural communities are groups of plants and animals and the landscapes they inhabit that occur repeatedly throughout the state. Natural areas, which represent the best of our remaining natural heritage, offer a glimpse into our pioneer past.

Since 1977, an interagency committee—The Missouri Natural Areas Committee (MoNAC)—has coordinated the inventory, classification, designation and stewardship of the Missouri Natural Areas Program. It is co-administered by the Missouri Department of Conservation and the Department of Natural Resources, with representation from the National Park Service, U.S. Forest Service, U.S. Fish & Wildlife Service and The Nature Conservancy. Designated Missouri natural areas occur on both public and privately owned lands. They represent the highest and best use of these properties.



REGAL FRITILLARY ON PALE
PURPLE CONEFLOWER AT A
PRAIRIE NATURAL AREA.

JIM RATHERT

WHY ARE NATURAL AREAS IMPORTANT?

Natural areas are repositories of genetic diversity that enhance our quality of life. The plants, animals and microorganisms found there have high scientific value, and may one day reveal important medical or economic values, as well. Natural areas provide important “living laboratories” and “outdoor classrooms” for scientists and teachers to use for research and teaching. They also provide ecological benchmarks for restoration projects.

In a sense, natural areas are living museums where people can experience the land the way it was at the time of the early explorers such as Lewis and Clark.



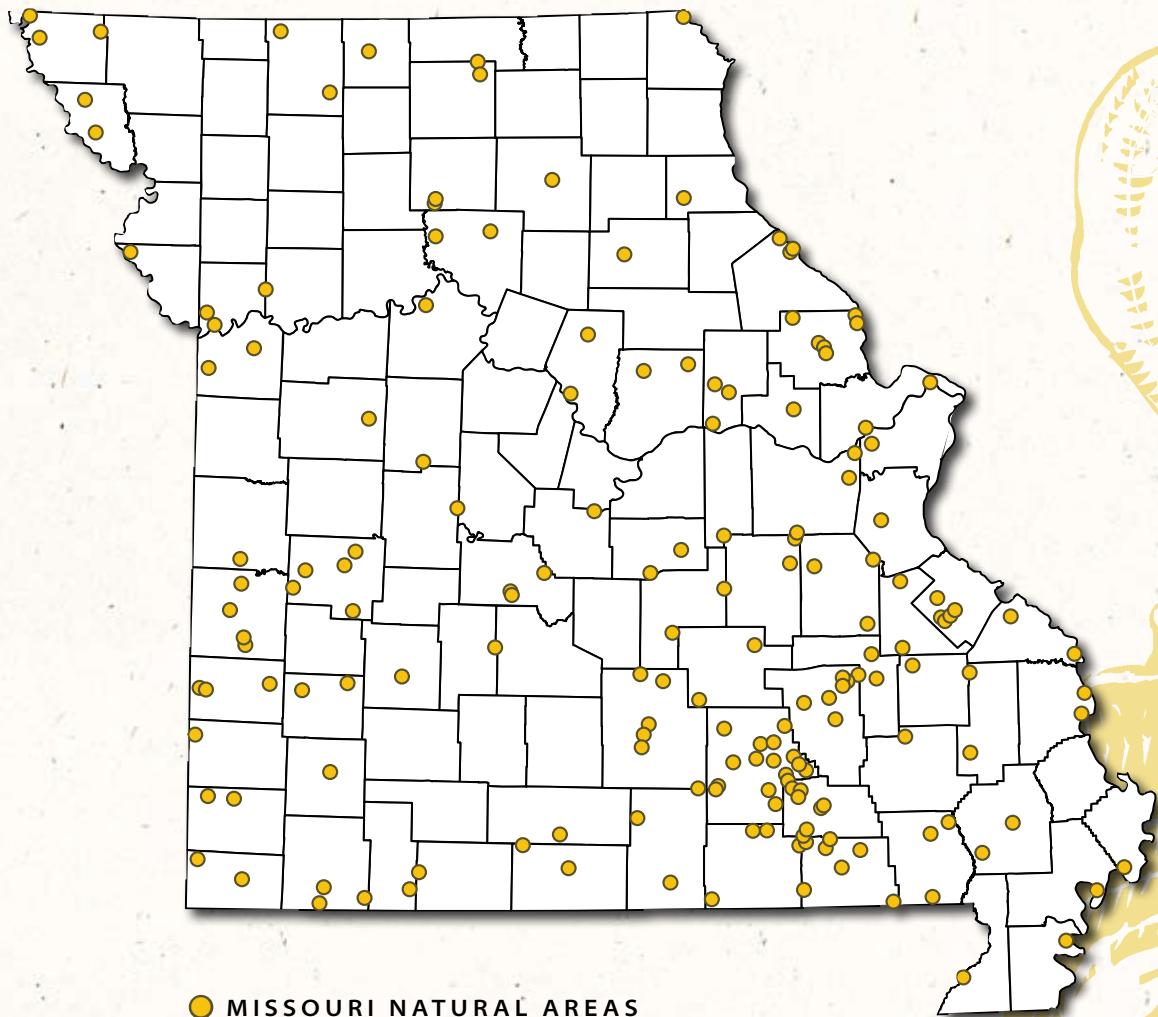
NOPPADOL PAOTHONG

MANY RARE ANIMAL SPECIES, SUCH AS THE LEAST BITTERN, USE WETLAND NATURAL AREAS.

Many natural areas provide essential habitat for species of conservation concern. For example, some cave natural areas provide important habitat for endangered bats, and prairie natural areas do the same for the endangered greater prairie-chicken. Many rare plants, such as the endangered pondberry, are conserved on our natural areas. Missouri's natural areas help us to conserve the biological diversity of the state and the nation.

NATURAL AREAS STEWARDSHIP

In today's fragmented landscape, the natural processes of fire, flooding, windstorms, natural predators and native grazers no longer sustain our ecosystems. Increasingly, non-native invasive species threaten natural areas; consequently, they require monitoring and active management. Many people mistakenly assume that once an area is designated as a natural area that it can be left alone forever. This is far from the truth. Natural areas typically require some form of active land management to restore or maintain their ecological integrity in the context of today's modern landscape.



A stylized illustration of a Jack-in-the-pulpit plant, featuring large, heart-shaped leaves and a long, slender stem with a small, bell-shaped flower. The illustration is rendered in yellow and green outlines against a light green background.

MAJOR NATURAL COMMUNITIES OF MISSOURI

ARE REPRESENTED IN THE
NATURAL AREAS SYSTEM.
THEY INCLUDE FORESTS,
WOODLANDS AND
SAVANNAS, GLADES,
SPRINGS, RIVERS AND
STREAMS, CLIFFS, WETLANDS,
PRAIRIES AND CAVES. EACH
NATURAL COMMUNITY SUPPORTS
A DIFFERENT COMBINATION
OF PLANTS, ANIMALS AND
MICROORGANISMS.

THE JACK-IN-THE-PULPIT IS THE SYMBOL
OF THE NATURAL AREAS PROGRAM.

WHITE RIVER BALDS NATURAL AREA



JIM RATHERT

GLADES are rocky openings that occur mainly on south and west slopes. They usually are intermingled with open woodlands. Bedrock is at or near the land surface, and the shallow soil layer supports dwarfed trees and native grasses, sedges and wildflowers.

FORESTS

have distinct layers of vegetation—a dense tree canopy cover, an understory of smaller trees, shrubs and vines, and a ground cover of shade-tolerant wildflowers, ferns and mosses.



CURRENT RIVER
NATURAL AREA

PAUL NELSON

CUPOLA POND NATURAL AREA



JIM RATHERT

WETLAND

natural communities are periodically saturated or covered by water, and water-loving plants are dominant. In Missouri, wetland natural community types include fens, seepage communities, marshes, sinkhole ponds and swamps.

CAVES are natural openings in the earth's surface; most are formed when groundwater dissolves limestone and dolomite. Many species of fish, invertebrates and microorganisms have evolved adaptations to survive in the darkness and isolation of caves. Caves are also important habitat for many bat species.



MOSSY SPRING CAVE
NATURAL AREA

BILL ELLIOTT

JACKS FORK NATURAL AREA

JIM RATHERT



RIVERS AND STREAMS

in Missouri support an abundance of plant and animal life, including 200 native species of fish and many mussel and crayfish species.

PRAIRIES

are extensive grasslands with a great diversity of wildflowers, few shrubs and scattered trees.

More than 15 million acres of Missouri's landscape were once prairie.



PAWNEE PRAIRIE NATURAL AREA

TOM NAGEL

BLUE SPRING
NATURAL AREA



JIM RATHER

SPRINGS are formed from a continual or intermittent natural flow of groundwater. Plants and animals found at springs have adapted to the constant, cool temperature of the spring environment.

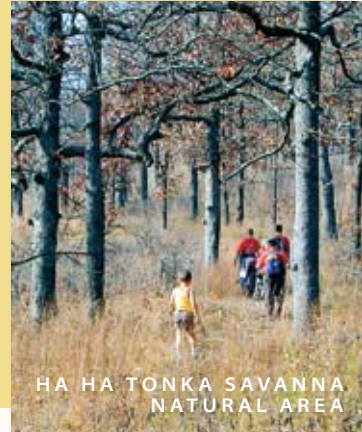
LONG BRANCH
NATURAL AREA



KEN MCCARTY

SAVANNAS, which are very rare, are fundamentally prairies with scattered trees. Widely spaced oaks, and occasionally hickories, grow amidst a thick ground cover of prairie grasses and wildflowers.

WOODLANDS, by comparison to forests, have a more open canopy of trees, and an open understory. This open understory allows enough sunlight to reach the ground to support a thick layer of sedges, grasses, low shrubs and wildflowers.



HA HA TONKA SAVANNA
NATURAL AREA

KEN MCCARTY

VISITING NATURAL AREAS

Most natural areas are open to the public. Hiking, nature study, bird watching, botanizing and nature photography are allowed on nearly all natural areas open to the public. Many natural areas on public lands are also open to hunting and fishing.

The specific types of public use allowed on each natural area vary, so please consult the area manager for regulations. Some natural areas have developed parking lots, hiking trails, boardwalks and other facilities. However, most lack developed facilities. Look for the Missouri Natural Areas System's Jack-in-the-Pulpit emblem on natural area boundary signs.

For more information on visiting a Missouri natural area, please consult the Missouri natural areas webpage of the Missouri Department of Conservation's website at www.mdc.mo.gov or use the links provided on other MoNAC member websites. You also may write the Natural Areas Coordinator, Missouri Department of Conservation, Wildlife Division, PO Box 180, Jefferson City MO 65102-0180 or the Natural Areas Coordinator, Missouri Department of Natural Resources, Division of State Parks, PO Box 176, Jefferson City MO 65102-0176.



JIM RATHERT

ALLRED LAKE NATURAL AREA

